

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-44 are currently pending. Claims 1, 23, 24, 26, 27, 30, 31, 32, 35, 36, 41, and 44 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1-44 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,115,138 to Yanaka (hereinafter “the ‘138 patent”).

Amended Claim 1 is directed to a data processing apparatus, comprising: (1) a data memory configured to store characteristic definition data defined for at least one data attribute; (2) a plurality of processing elements each configured to select a set of characteristic definition data from the characteristic definition from a data stream to be processed and to process data from the data stream according to the set of characteristic definition data, wherein each processing element is configured to perform a same operation according to a same instruction code. Further, Claim 1 recites that the data processing apparatus includes a process control apparatus configured to control at least one of (a) storing process control data for controlling the plurality of processing elements, (b) imparting an operation instruction set based on the process control data to each of the plurality of processing elements in common, (c) imparting the data stream to each of the plurality of processing elements, (d) sending out the characteristic definition data stored in the data memory to each of the plurality of processing elements, and (e) outputting processed data from each of the plurality of processing elements. The changes to Claim 1 are supported by the originally filed specification and do not add new matter.¹

¹ See e.g., page 54, lines 26-27 of the specification.

Applicant respectfully submits that the rejection of Claim 1 (and all associated dependent claims) is rendered moot by the present amendment to Claim 1.

The ‘138 patent is directed to an image forming apparatus including (1) an image data memory portion storing data representative of luminance components and chrominance components of an image; (2) an image memory control portion for making the image data memory portion perform writing and reading of the data; and (3) an image processing portion. The ‘138 patent discloses that the image processor performs image processing depending upon a plurality of data types such as additive color mixing or subjective color mixing.

Regarding the claimed plurality of processing elements, the Office Action cites column 2, lines 24-50 of the ‘138 application. This passage in the ‘138 patent discloses an image processing portion that includes a selection operation control portion, a data selectively transmitting portion, a masking portion, a pallet converting portion, a color data selectively transmitting portion, a binarization converting portion, and an image processing operation control portion.

However, Applicant respectfully submits that the ‘138 patent fails to disclose a plurality of processing elements each configured to select a set of characteristic definition data from the characteristic definition data from a data stream to be processed and to process data from the data stream according to the set of characteristic definition data, wherein each processing element is configured to perform a same operation according to a same instruction code, as recited in amended Claim 1. Rather, the Office Action refers to seven different parts of an image processor that perform seven different functions. Accordingly, Applicant respectfully submits that the rejection of Claim 1 (and all associated dependent claims) is rendered moot by the present amendment to that claim.

Independent Claims 23, 31, 32, and 35 recite limitations analogous to the limitations recited in Claim 1. Moreover, Claims 23, 31, 32, and 35 have been amended in a manner analogous to the amendment to Claim 1. Accordingly, for reasons analogous to the reasons stated above for the patentability of Claim 1, Applicant's respectfully submit that the rejections of Claims 23, 31, 32, and 35 (and all associated dependent claims) is rendered moot by the present amendment to Claims 23, 31, 32, and 35.

Claim 9 is directed to a data processing apparatus, comprising: (1) a data memory configured to store characteristic definition data for defining characteristics of data processing for attribute data; (2) a global register configured to store a conversion program set; (3) a processor array comprising a plurality of processing elements, (4) a global processor; and (5) a program memory configured to store a process program set for the global processor to perform control. Further, Claim 9 clarifies that each of the plurality of processing elements includes: (a) an input data register configured to store data to be conversion processed, (b) a plurality of character registers each configured to store conversion characteristic definition data, (c) an attribute register configured to store attribute data for the data to be conversion processed, (d) an output data register configured to store processed data acquired by conversion processing, and (e) a calculator configured to select a set of conversion characteristic definition data for subsequent storage in the character registers, the conversion characteristic definition data being assigned to attribute data stored in the character registers among conversion characteristic definition data corresponding to attribute data stored in said character registers, and to perform conversion processing on the data to be conversion processed according to a conversion operation instruction set based on said conversion control program and according to conversion characteristic definition data stored in the character registers. Thus, Claim 9 requires that each of a plurality of processing

elements includes five elements: (1) an input data register; (2) a plurality of character registers; (3) an attribute register; (4) an output data register; and (5) a calculator.

Regarding the rejection of Claim 9, the Office Action asserts that the ‘138 patent discloses the plurality of processing elements in column 2, lines 21-30; column 9, lines 8-31; and column 10, lines 42-45. In particular, the Office Action asserts that the claimed calculator is shown in column 10, while the attribute register and the output data register are shown in column 9. However, Applicant notes that the disclosure in column 9, lines 8-17 refers to a “register portion” shown in Figure 5. Likewise, the disclosure in column 9, lines 22-31 appears to be directed to the same “register portion” shown in Figure 5. Regarding the claimed plurality of character registers, Applicant notes that the Office Action refers to column 2, lines 25-30, which is directed to a selection operation control portion for making an image control memory portion to selectively perform a writing operation of the image data memory portion adapted to the type of data. However, this selection appears to be unrelated to a plurality of character registers configured to store conversion characteristic definition data. Moreover, it is unclear how the passage in column 2 relates in any way to the register shown in Figure 5. Moreover, regarding the input data register, the Office Action refers to column 2, lines 21-23, which relates to an image control portion for making an image data memory portion to perform writing and reading operation of the data. However, this appears to be unrelated to an input data register.

Thus, Applicant respectfully submits that the ‘138 patent fails to disclose a plurality of processing elements each including an input data register, a plurality of character registers, an attribute register, an output data register, and a calculator, as recited in Claim 9. In this regard, Applicant notes that the Office Action has relied on column 2 as disclosing two of the elements in the plurality of processing elements, and has relied on column 9 as disclosing two of the registers disclosed in Claim 9, and has relied on column 10 for the calculator recited in

Claim 9. However, Applicant respectfully submits that the Office Action has failed to provide any evidence that all of the five elements are included in each of a plurality of processing elements, as required by Claim 9. Even assuming *arguendo* that the Office Action has found the five elements recited in Claim 9, the Office Action has failed to show that these elements are all included in each of a plurality of processing elements. Rather, the Office Action has chosen five elements disclosed by the ‘138 patent, without regard to whether these elements are related, and without regard to whether these elements perform the functions recited in Claim 9. In particular, Applicant notes that the Office Action has only identified one register, i.e., the “register portion” shown in Figure 5. The Office Action has failed to identify the four types of registers recited in Claim 9 and has failed to show that these four types of registers are all contained in each of a plurality of processing elements, as required by Claim 9.

For the reasons stated above, Applicant respectfully traverses the rejection of Claim 9 as anticipated by the ‘138 patent.

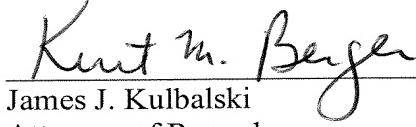
Independent Claims 10 and 13 recite limitations analogous to the limitations recited in Claim 9. Accordingly, for reasons analogous to the reasons stated above for the patentability of Claim 9, Applicant respectfully traverses the rejection of Claims 10 and 13 (and all similarly rejected dependent claims) as anticipated by the ‘138 patent.

Thus, it is respectfully submitted that independent Claims 1, 9, 10, 13, 21, 31, 32, and 35 (and all associated dependent claims) patentably define over the ‘138 patent.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that result is respectfully requested.

Respectfully submitted,

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